

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 64-054749

(43)Date of publication of application : 02.03.1989

(51)Int.Cl.

H01L 23/28

H01L 21/60

H01L 23/50

(21)Application number : 62-211993

(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

(22)Date of filing : 26.08.1987

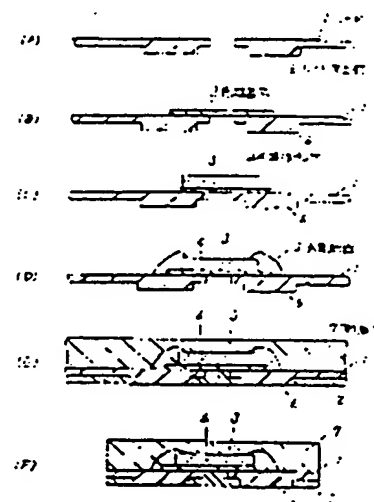
(72)Inventor :  
KITAHIRO ISAMU  
KONDO SHUJI  
KIKUCHI TATSUO  
TAKASE YOSHIHISA

## (54) SEMICONDUCTOR DEVICE AND MANUFACTURE THEREOF

## (57)Abstract:

PURPOSE: To obtain a highly accurate and highly reliable semiconductor device by placing a semiconductor chip through an insulating substrate on one group of highly accurate metal leads, connecting the leads to fine metal wirings, and transfer molding them.

CONSTITUTION: A thin resin plate 3 is attached to leads 1 having protrusions 6, and electrodes on a semiconductor chip 4 are connected to the leads 1 by fine metal wirings 5. Then, the leads except the protrusions 6 are sealed with resins 2, 7, shape and size are determined and cut. According to this structure, a small-sized and thin semiconductor device having high dimensional accuracy and reliability is obtained without complicated structure like a both-side substrate only by employing metal leads of special shape at part, and is preferably adapted for an IC.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C): 1998,2000 Japan Patent Office

図 2

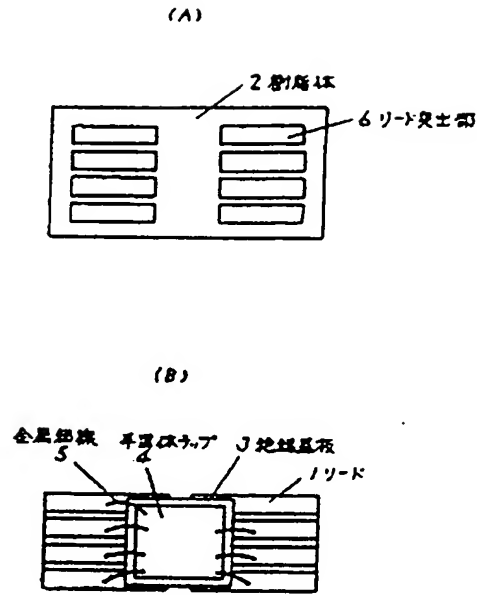


図 3

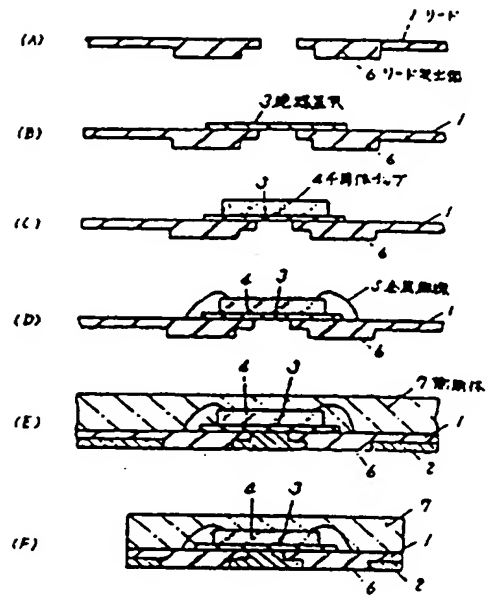


図 4

